

What is claimed is:

1 1. A system of video stream encryption,
2 comprising:

3 a storage device capable of storing a first
4 quantization scale and a second quantization
5 scale, wherein the first quantization scale is
6 greater than the second quantization scale; and
7 an encryption application coupled to the storage
8 device, configured to receive video data, the
9 first quantization scale and the second
10 quantization scale, generate quantized data by
11 dividing the video into the first quantization
12 scale, generate supplementary data by
13 subtracting the quantized data multiplied by
14 the first quantization scale from the video
15 data, generate quantized supplementary data by
16 dividing the supplementary data into the second
17 quantization scale, encode and encrypt the
18 quantized supplementary data using variable
19 length encoding and symmetrical/asymmetrical
20 encryption algorithm.

1 2. The system as claimed in claim 1 further
2 comprising a first compression application configured to
3 receive and compress video data.

1 3. The system as claimed in claim 2 wherein the
2 video data is compressed using motion prediction.

1 4. The system as claimed in claim 2 wherein the
2 video data is compressed using discrete cosine
3 transformation (DCT).

1 5. The system as claimed in claim 1 further
2 comprising a second compression application configured to
3 receive the quantized data and generate encoded quantized
4 data using variable length encoding.

1 6. A method of video stream encryption, comprising
2 using an electronic device having a CPU to perform the
3 steps of:

4 receiving video data, a first quantization scale and
5 a second quantization scale, wherein the first
6 quantization scale is greater than the second
7 quantization scale;

8 generating quantized data by dividing the video data
9 into the first quantization scale;

10 generating supplementary data by subtracting the
11 quantized data multiplied by the first
12 quantization scale from the video; and

13 generating encrypted quantized supplementary data
14 using variable length encoding and
15 symmetrical/asymmetrical encryption algorithm.

1 7. The method as claimed in claim 6 further
2 comprising compressing the video data.

1 8. The method as claimed in claim 7 wherein the
2 compression method uses motion prediction.

1 9. The method as claimed in claim 7 wherein the
2 compression method uses discrete cosine transformation
3 (DCT) .

1 10. The method as claimed in claim 6, further
2 comprising generating encoded quantized data from the
3 quantized data using variable length encoding.

1 11. A storage medium for storing a computer program
2 providing a method of video stream encryption, comprising
3 using a computer to perform the steps of:
4 receiving video data, a first quantization scale and
5 a second quantization scale, wherein the first
6 quantization scale is greater than the second
7 quantization scale;
8 generating quantized data by dividing the video into
9 the first quantization scale;
10 generating a supplementary data by subtracting
11 quantized data multiplied by the first
12 quantization scale from the video; and
13 generating encrypted quantized supplementary data
14 using variable length encoding and
15 symmetrical/asymmetrical encryption algorithm.

1 12. The method as claimed in claim 11, further
2 comprising compressing the video data.

1 13. The method as claimed in claim 12 wherein the
2 compression method uses motion prediction.

1 14. The method as claimed in claim 12 wherein the
2 compression method uses discrete cosine transformation
3 (DCT).

1 15. The method as claimed in claim 11, further
2 comprising generating encoded quantized data from the
3 quantized data using variable length encoding.